TCTCTGACC ATGGATGTACCACCTACCATTCACGTTCCTCTGCCGCCGACGTCTTACCCG  
GCGTTCGACGCGGCGATCTTCACCGACATCGGTGGCCGTAAACACCAGGAAGACCGCTTC  
ACCCTGTGCCCGCAGCTGGTTCCGGGTCGTGACGACTGCGCGTTCTTCGGTGTTTTCGAT  
GGTACCGTTGGTGACTTCGCGTCTGAAAACGTTAAGGACCTGGTTGTTCCTCAGCTCATC  
TCTTCTCCGGCGTGGCAGGAAGTGACCGAAATGCTGCGTTCTGATGTTCCAGCCACTGAG  
GTTGATGAGAAACTGCCGCAACTGCTGGACCAGGCGGTAGACGACATGTACAAAAACGCG  
GACAACGAGCTGGTGAAAATGTGCGAACAGCTGAACAAAGACTACGCGTCTTCTACCTCT  
GTTACCGCCGTTCTGGCGAAAGGTTTCGTTGCGGTTGGTCACCTGGGTGACTCTCGTATT  
GCGATGGGTGTTGAAACCCCGAACGGTCTCAACTGCGAATTCCTGACCGTTGACCACAAA  
CCGGACATGCCGCACGAAAAACTGCGTATTATGCGTAACGGTGGTTCTGTTGAATACCTG  
CACAACCACAACAACAAGCCGTTCATCCGTGGTGGCGACTTCTCTTTCCGTAAATCTCGT  
GGTGAACAGCCGATGCAGCTCCAGTATTCTCGTGCGTTCGGTGGTAAAGACCTCAAAATG  
TACGGTCTGTCTAACCAGCCGGACGTTCGTGTTGTGCGTGTTACTCCGCAGCACCGTGTT  
ATGATCCTGGCGACCGATGGTCTGTGGGACGTTATGTCTGCGGCGCAGGCCGTTGAGATT  
GCCATGCAAGCACGTCAAGAAGGTCGTAATCCGGCGCAAGCGCTCGTCGAAATGACCCTG  
GCGGAACAGCAGTCTCGTAACCAGAGCGCCGACAACACCGCGATGACGGTTTTCTTCAAA  
AAAACCGACTAA

Upstream:

5’ TACTTCCAATCCATGATGGATGTACCACCTACCATT 3’

Downstream:

5’ TTCTTCAAAAAAACCGACTAACAGTAAAGGTGGATA 3’

Reverse Complement:

5’ TATCCACCTTTACTGTTAGTCGGTTTTTTTGAAGAA 3’

**Virtual Plasmid**

**Insert**

~~TCTCTGACC~~ **TACTTCCAATCC**ATGGATGTACCACCTACCATTCACGTTCCTCTGCCGCCGACGTCTTACCCG  
GCGTTCGACGCGGCGATCTTCACCGACATCGGTGGCCGTAAACACCAGGAAGACCGCTTC  
ACCCTGTGCCCGCAGCTGGTTCCGGGTCGTGACGACTGCGCGTTCTTCGGTGTTTTCGAT  
GGTACCGTTGGTGACTTCGCGTCTGAAAACGTTAAGGACCTGGTTGTTCCTCAGCTCATC  
TCTTCTCCGGCGTGGCAGGAAGTGACCGAAATGCTGCGTTCTGATGTTCCAGCCACTGAG  
GTTGATGAGAAACTGCCGCAACTGCTGGACCAGGCGGTAGACGACATGTACAAAAACGCG  
GACAACGAGCTGGTGAAAATGTGCGAACAGCTGAACAAAGACTACGCGTCTTCTACCTCT  
GTTACCGCCGTTCTGGCGAAAGGTTTCGTTGCGGTTGGTCACCTGGGTGACTCTCGTATT  
GCGATGGGTGTTGAAACCCCGAACGGTCTCAACTGCGAATTCCTGACCGTTGACCACAAA  
CCGGACATGCCGCACGAAAAACTGCGTATTATGCGTAACGGTGGTTCTGTTGAATACCTG  
CACAACCACAACAACAAGCCGTTCATCCGTGGTGGCGACTTCTCTTTCCGTAAATCTCGT  
GGTGAACAGCCGATGCAGCTCCAGTATTCTCGTGCGTTCGGTGGTAAAGACCTCAAAATG  
TACGGTCTGTCTAACCAGCCGGACGTTCGTGTTGTGCGTGTTACTCCGCAGCACCGTGTT  
ATGATCCTGGCGACCGATGGTCTGTGGGACGTTATGTCTGCGGCGCAGGCCGTTGAGATT  
GCCATGCAAGCACGTCAAGAAGGTCGTAATCCGGCGCAAGCGCTCGTCGAAATGACCCTG  
GCGGAACAGCAGTCTCGTAACCAGAGCGCCGACAACACCGCGATGACGGTTTTCTTCAAA  
AAAACCGACTAA**CAGTAAAGGTGGATA**

**Accepting Vector with Insert**

TAATACGACTCACTATAGGGGAATTGTGAGCGGATAACAATTCCCCTCTAGAAATAATTTTGTTTAACTTTAAGAAGGAGATATACATATGCACCATCATCATCATCATTCTTCTGGTGTAGATCTGGGTACCGAGAACCTGTACTTCCAATCCATGGATGTACCACCTACCATTCACGTTCCTCTGCCGCCGACGTCTTACCCGGCGTTCGACGCGGCGATCTTCACCACATCGGTGGCCGTAAACACCAGGAAGACCGCTTCACCCTGTGCCCGCAGCTGGTTCCGGGTCGTGACGACTGCGGTTCTTCGGTGTTTTCGATGGTACCGTTGGTGACTTCGCGTCTGAAAACGTTAAGGACCTGGTTGTTCCTCAGCTCACTCTTCTCCGGCGTGGCAGGAAGTGACCGAAATGCTGCGTTCTGATGTTCCAGCCACTGAGGTTGATGAGAAACTCCGCAACTGCTGGACCAGGCGGTAGACGACATGTACAAAAACGCGGACAACGAGCTGGTGAAAATGTGCGAACAGTGAACAAAGACTACGCGTCTTCTACCTCTGTTACCGCCGTTCTGGCGAAAGGTTTCGTTGCGGTTGGTCACCTGGGGACTCTCGTATTGCGATGGGTGTTGAAACCCCGAACGGTCTCAACTGCGAATTCCTGACCGTTGACCACAAACCGGCATGCCGCACGAAAAACTGCGTATTATGCGTAACGGTGGTTCTGTTGAATACCTGCACAACCACAACAACAAGCCGTTCATCCGTGGTGGCGACTTCTCTTTCCGTAAATCTCGTGGTGAACAGCCGATGCAGCTCCAGTATTCTCGTGCGTTCGGTGGTAAAGACCTCAAAATGTACGGTCTGTCTAACCAGCCGGACGTTCGTGTTGTGCGTGTTACTCCGCAGCACCGTGTTATGATCCTGGCGACCGATGGTCTGTGGGACGTTATGTCTGCGGCGCAGGCCGTTGAGATTGCCATGCAAGCACGTCAAGAAGGTCGTAATCCGGCGCAAGCGCTCGTCGAAATGACCCTGGCGGAACAGCAGTCTCGTAACCAGAGCGCCGACAACACCGCGATGACGGTTTTCTTCAAAAAAACCGACTAACAGTAAAGGTGGATACGGATCCGAATTGAGCTCCGTCGACAAGCTTGCGGCCGCACTCGAGCACCACCACCACCACCACTGAGATCCGGCTGCTAACAAAGCCGAAAGGAAGCTGAGTTGGCTGCTGCCACCGCTGAGCAATAACTAGCATAACCCCTTGGGGCCTCTAAACGGGTCTTGAGGGGTTTTTTGCTGAAAGGAGGAACTATATCCGGATTGGCGAATGGGACGCGCCCTGTAGCGGCGCATTAAGCGCGGCGGGTGTGGTGGTTACGCGCAGCGTGACCGCTACACTTGCCAGCGCCCTAGCGCCCGCTCCTTTCGCTTTCTTCCCTTCCTTTCTCGCCACGTTCGCCGGCTTTCCCCGTCAAGCTCTAAATCGGGGGCTCCCTTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCGACCCCAAAAAACTTGATTAGGGTGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTCGCCCTTTGACGTTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCCAAACTGGAACAACACTCAACCCTATCTCGGTCTATTCTTTTGATTTATAAGGGATTTTGCCGATTTCGGCCTATTGGTTAAAAAATGAGCTGATTTAACAAAAATTTAACGCGAATTTTAACAAAATATTAACGTTTACAATTTCAGGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCCTATTTGTTTATTTTTCTAAATACATTCAAATATGTATCCGCTCATGAATTAATTCTTAGAAAAACTCATCGAGCATCAAATGAAACTGCAATTTATTCATATCAGGATTATCAATACCATATTTTTGAAAAAGCCGTTTCTGTAATGAAGGAGAAAACTCACCGAGGCAGTTCCATAGGATGGCAAGATCCTGGTATCGGTCTGCGATTCCGACTCGTCCAACATCAATACAACCTATTAATTTCCCCTCGTCAAAAATAAGGTTATCAAGTGAGAAATCACCATGAGTGACGACTGAATCCGGTGAGAATGGCAAAAGTTTATGCATTTCTTTCCAGACTTGTTCAACAGGCCAGCCATTACGCTCGTCATCAAAATCACTCGCATCAACCAAACCGTTATTCATTCGTGATTGCGCCTGAGCGAGACGAAATACGCGATCGCTGTTAAAAGGACAATTACAAACAGGAATCGAATGCAACCGGCGCAGGAACACTGCCAGCGCATCAACAATATTTTCACCTGAATCAGGATATTCTTCTAATACCTGGAATGCTGTTTTCCCGGGGATCGCAGTGGTGAGTAACCATGCATCATCAGGAGTACGGATAAAATGCTTGATGGTCGGAAGAGGCATAAATTCCGTCAGCCAGTTTAGTCTGACCATCTCATCTGTAACATCATTGGCAACGCTACCTTTGCCATGTTTCAGAAACAACTCTGGCGCATCGGGCTTCCCATACAATCGATAGATTGTCGCACCTGATTGCCCGACATTATCGCGAGCCCATTTATACCCATATAAATCAGCATCCATGTTGGAATTTAATCCGGCCTAGAGCAAGACGTTTCCCGTTGAATATGGCTCATAACACCCCTTGTATTACTGTTTATGTAAGCAGACAGTTTTATTGTTCATGACCAAAATCCCTTAACGTGAGTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGGTGGTTTGTTTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAAGGTAACTGGCTTCAGCAGAGCGCAGATACCAAATACTGTCCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTCGGGCTGAACGGGGGGTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTCGGTTTCGCCACCTCTGACTTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAAACGCCAGCAACGCGGCCTTTTTACGGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCCTGCGTTATCCCCTGATTCTGTGGATAACCGTATTACCGCCTTTGAGTGAGCTGATACCGCTCGCCGCAGCCGAACGACCGAGCGCAGCGAGTCAGTGAGCGAGGAAGCGGAAGAGCGCCTGATGCGGTATTTTCTCCTTACGCATCTGTGCGGTATTTCACACCGCATATATGGTGCACTCTCAGTACAATCTGCTCTGATGCCGCATAGTTAAGCCAGTATACACTCCGCTATCGCTACGTGACTGGGTCATGGCTGCGCCCCGACACCCGCCAACACCCGCTGACGCGCCCTGACGGGCTTGTCTGCTCCCGGCATCCGCTTACAGACAAGCTGTGACCGTCTCCGGGAGCTGCATGTGTCAGAGGTTTTCACCGTCATCACCGAAACGCGCGAGGCAGCTGCGGTAAAGCTCATCAGCGTGGTCGTGAAGCGATTCACAGATGTCTGCCTGTTCATCCGCGTCCAGCTCGTTGAGTTTCTCCAGAAGCGTTAATGTCTGGCTTCTGATAAAGCGGGCCATGTTAAGGGCGGTTTTTTCCTGTTTGGTCACTGATGCCTCCGTGTAAGGGGGATTTCTGTTCATGGGGGTAATGATACCGATGAAACGAGAGAGGATGCTCACGATACGGGTTACTGATGATGAACATGCCCGGTTACTGGAACGTTGTGAGGGTAAACAACTGGCGGTATGGATGCGGCGGGACCAGAGAAAAATCACTCAGGGTCAATGCCAGCGCTTCGTTAATACAGATGTAGGTGTTCCACAGGGTAGCCAGCAGCATCCTGCGATGCAGATCCGGAACATAATGGTGCAGGGCGCTGACTTCCGCGTTTCCAGACTTTACGAAACACGGAAACCGAAGACCATTCATGTTGTTGCTCAGGTCGCAGACGTTTTGCAGCAGCAGTCGCTTCACGTTCGCTCGCGTATCGGTGATTCATTCTGCTAACCAGTAAGGCAACCCCGCCAGCCTAGCCGGGTCCTCAACGACAGGAGCACGATCATGCGCACCCGTGGGGCCGCCATGCCGGCGATAATGGCCTGCTTCTCGCCGAAACGTTTGGTGGCGGGACCAGTGACGAAGGCTTGAGCGAGGGCGTGCAAGATTCCGAATACCGCAAGCGACAGGCCGATCATCGTCGCGCTCCAGCGAAAGCGGTCCTCGCCGAAAATGACCCAGAGCGCTGCCGGCACCTGTCCTACGAGTTGCATGATAAAGAAGACAGTCATAAGTGCGGCGACGATAGTCATGCCCCGCGCCCACCGGAAGGAGCTGACTGGGTTGAAGGCTCTCAAGGGCATCGGTCGAGATCCCGGTGCCTAATGAGTGAGCTAACTTACATTAATTGCGTTGCGCTCACTGCCCGCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTTGCGTATTGGGCGCCAGGGTGGTTTTTCTTTTCACCAGTGAGACGGGCAACAGCTGATTGCCCTTCACCGCCTGGCCCTGAGAGAGTTGCAGCAAGCGGTCCACGCTGGTTTGCCCCAGCAGGCGAAAATCCTGTTTGATGGTGGTTAACGGCGGGATATAACATGAGCTGTCTTCGGTATCGTCGTATCCCACTACCGAGATATCCGCACCAACGCGCAGCCCGGACTCGGTAATGGCGCGCATTGCGCCCAGCGCCATCTGATCGTTGGCAACCAGCATCGCAGTGGGAACGATGCCCTCATTCAGCATTTGCATGGTTTGTTGAAAACCGGACATGGCACTCCAGTCGCCTTCCCGTTCCGCTATCGGCTGAATTTGATTGCGAGTGAGATATTTATGCCAGCCAGCCAGACGCAGACGCGCCGAGACAGAACTTAATGGGCCCGCTAACAGCGCGATTTGCTGGTGACCCAATGCGACCAGATGCTCCACGCCCAGTCGCGTACCGTCTTCATGGGAGAAAATAATACTGTTGATGGGTGTCTGGTCAGAGACATCAAGAAATAACGCCGGAACATTAGTGCAGGCAGCTTCCACAGCAATGGCATCCTGGTCATCCAGCGGATAGTTAATGATCAGCCCACTGACGCGTTGCGCGAGAAGATTGTGCACCGCCGCTTTACAGGCTTCGACGCCGCTTCGTTCTACCATCGACACCACCACGCTGGCACCCAGTTGATCGGCGCGAGATTTAATCGCCGCGACAATTTGCGACGGCGCGTGCAGGGCCAGACTGGAGGTGGCAACGCCAATCAGCAACGACTGTTTGCCCGCCAGTTGTTGTGCCACGCGGTTGGGAATGTAATTCAGCTCCGCCATCGCCGCTTCCACTTTTTCCCGCGTTTTCGCAGAAACGTGGCTGGCCTGGTTCACCACGCGGGAAACGGTCTGATAAGAGACACCGGCATACTCTGCGACATCGTATAACGTTACTGGTTTCACATTCACCACCCTGAATTGACTCTCTTCCGGGCGCTATCATGCCATACCGCGAAAGGTTTTGCGCCATTCGATGGTGTCCGGGATCTCGACGCTCTCCCTTATGCGACTCCTGCATTAGGAAGCAGCCCAGTAGTAGGTTGAGGCCGTTGAGCACCGCCGCCGCAAGGAATGGTGCATGCAAGGAGATGGCGCCCAACAGTCCCCCGGCCACGGGGCCTGCCACCATACCCACGCCGAAACAAGCGCTCATGAGCCCGAAGTGGCGAGCCCGATCTTCCCCATCGGTGATGTCGGCGATATAGGCGCCAGCAACCGCACCTGTGGCGCCGGTGATGCCGGCCACGATGCGTCCGGCGTAGAGGATCGAGATCTCGATCCCGCGAAAT

Image of Accepting Vector with Insert

